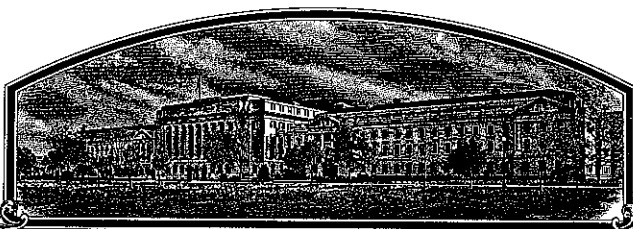


No.

9200074



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Maryland Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE  
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OF THE OWNER OF THE RIGHTS. (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Corsica'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this 31st day of August in the year of our Lord one thousand nine hundred and ninety-four.

Attest:

*Kenneth A. Evans*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Mike Esny*  
Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**  
(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Maryland Agricultural Experiment Station		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. Md 85-5443	3. VARIETY NAME Corsica
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) Maryland Institute for Agriculture & Natural Resources 1116 Symons Hall, University of Maryland College Park, MD 20742		5. PHONE (include area code) (301) 405-1210	<b>FOR OFFICIAL USE ONLY</b> VPVO NUMBER 9200074  F I L I N G Date Jan. 22, 1992 Time <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.  F E E S Filing and Examination Fee: \$ 2150.- Date Jan. 22, 1992 R E C E I V E D Certificate Fee: \$ 250.00 Date Aug. 4, 1994
6. GENUS AND SPECIES NAME Glycine max (L.) Merr.	7. FAMILY NAME (Botanical) Leguminosae		
8. CROP KIND NAME (Common Name) Soybean	9. DATE OF DETERMINATION November, 1985		
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) State Experiment Station			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Dr. William J. Kenworthy Agronomy Department University of Maryland College Park, MD 20742 (301) 405-1324 PHONE (include area code):			

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

- a. ☒ Exhibit A, Origin and Breeding History of the Variety.  
b. ☒ Exhibit B, Novelty Statement.  
c. ☒ Exhibit C, Objective Description of Variety.  
d. ☐ Exhibit D, Additional Description of Variety.  
e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.  
f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office 1-22-92  
g. ☒ Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.)

☒ YES (If "YES," answer items 16 and 17 below) ☐ NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☒ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

☐ YES (If "YES," through ☐ Plant Variety Protection Act ☐ Patent Act. Give date: \_\_\_\_\_)  
☒ NO

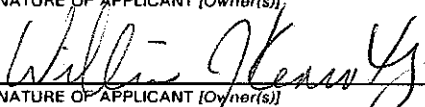
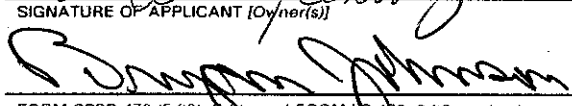
19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?

☒ YES (If "YES," give names of countries and dates) U.S. Release date- August 1, 1991  
☐ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) 	CAPACITY OR TITLE Plant Breeder & Professor	DATE Jan. 21, 1992
SIGNATURE OF APPLICANT (Owner(s)) 	CAPACITY OR TITLE Associate Director MARE	DATE Jan. 22, 1992

## EXHIBIT A - ORIGIN AND BREEDING HISTORY

## 'CORSICA' SOYBEAN

CORSICA is a  $F_4$ -derived plant selection from the cross Essex x Harper. The original cross was made at the Wye Research and Education Center, Queenstown, MD, during the summer of 1982. The  $F_1$  plants were grown in the University of Maryland greenhouse complex to produce  $F_2$  seeds. The  $F_2$  progeny were advanced to the  $F_4$  generation by single-seed descent in Maryland and Puerto Rico.  $F_4$ -derived lines were evaluated in Maryland in 1985, and Md85-5443 was identified as having a desirable plant type with uniform height, flower color, and pubescence color. Md85-5443 was tested for yield in Maryland during 1986, in the Mid-Atlantic Regional Soybean Tests during 1987, and in the Northern Regional Soybean Tests from 1988-1991.

Breeder seed of Md85-5443 was increased in Maryland in 1989 and 1990. It was evaluated for uniform maturity, plant height, and color of flowers, pubescence, and pod walls. Md85-5443 was designated CORSICA and foundation seed was produced in 1991 by foundation seed organizations in states participating in its release. Foundation seed will be distributed to certified seed growers for planting in 1992.

Observations indicate CORSICA is uniform and stable within commercially acceptable limits. CORSICA seeds have a gray hilum color. Typically the hilum color can range from near black to near buff from seed to seed. Light tan-colored hila are also produced on some seeds. Seed protein peroxidase activity is high for all seeds of CORSICA regardless of hilum color. As is true with other soybean varieties, a small percentage of off-types or variants can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplication. Breeder seed of CORSICA met the purity standards for foundation seed in Maryland. To meet this standard, a variety cannot have any off-types or variants present.

CORSICA has shown evidence of stability. The attached data are indicative of a stable variety.

## From Regional Summary of Uniform Test IV

Strain	Yield Bu/A	Maturity Date	Lodging (Score)*	Plant Height (In.)	Seed Quality (Score)*	Seed Size (g/100)	Seed Composition	
							Protein (%)	Oil (%)
No. of Tests	21	16	20	21	19	17	5	5
Flyer	50.5	-3.1	1.3	30	1.8	15.0	41.6	21.2
Delsoy 4500	48.8	4.4	1.8	37	1.5	14.7	40.9	20.8
Pennyrile	49.7	5.1	1.7	38	1.6	16.0	41.4	20.8
Ripley	48.0	-0.5	1.3	21	1.5	13.9	39.5	21.1
Spencer	49.3	9-30**	1.3	32	1.8	17.6	40.7	21.8
CORSICA	51.5	-2.4	1.5	31	1.6	16.9	42.0	20.7

\*\* 124.8 days after planting

No. of Tests	1989-1990, 2 year means							
	39	33	39	38	37	35	9	9
Flyer	50.6	-3.6	1.4	31	1.8	15.0	41.7	20.9
Pennyrile	48.3	6.2	1.7	40	1.8	16.5	41.8	20.6
Ripley	48.2	-0.6	1.2	22	1.5	14.1	39.4	20.9
Spencer	49.2	9-30**	1.4	33	2.2	18.0	41.1	21.4
CORSICA	52.0	-0.4	1.6	32	1.8	17.0	42.2	20.4

\*\* 128.7 days after planting

\* Score: 1=Best to 5=Worst

## EXHIBIT B - NOVELTY STATEMENT

## CORSICA SOYBEAN

To our knowledge CORSICA most nearly resembles Flyer, Spencer, Pennyrile, and Ripley. Differences include, but are not necessarily restricted to the following:

1. Corsica is earlier maturing than Pennyrile (6 days) and later maturing than Flyer (3 days).
2. Corsica is susceptible to Phytophthora race 1 while Flyer and Spencer are resistant.
3. Corsica has an indeterminate plant growth habit while Ripley has a determinate plant growth habit.
4. Corsica has a seed size (17g/100) that is larger than Flyer (15g/100) and Ripley (14g/100), but smaller than Spencer (18g/100).
5. Corsica has purple flowers, tan pods, and brown pubescence while Flyer has purple flowers, tan pods, and brown pubescence; Pennyrile has white flowers, brown pods, and brown pubescence; and Ripley has purple flowers, tan pods, and gray pubescence.

PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MARYLAND 20705OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) Maryland Agricultural Experiment Station	TEMPORARY DESIGNATION Md 85-5443	VARIETY NAME Corsica
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) Maryland Institute for Agriculture and Natural Resources 1116 Symons Hall, University of Maryland College Park, MD 20742		FOR OFFICIAL USE ONLY PVPO NUMBER 9200074

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,   ). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

## 1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = &lt; 1.2)

3 = Elongate (L/T ratio &gt; 1.2; T/W = &lt; 1.2)

2 = Spherical Flattened (L/W ratio &gt; 1.2; L/T ratio = &lt; 1.2)

4 = Elongate Flattened (L/T ratio &gt; 1.2; T/W &gt; 1.2)

## ★ 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow

2 = Green

3 = Brown

4 = Black

5 = Other (Specify) \_\_\_\_\_

## 3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton')

2 = Shiny ('Nebsoy'; 'Gasoy 17')

## ★ 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

## ★ 5. HILUM COLOR: (Mature Seed)

1 = Buff

2 = Yellow

3 = Brown

4 = Gray ★

5 = Imperfect Black

6 = Black

7 = Other (Specify) \_\_\_\_\_

\*Color can range from near black to near buff with some light tan See Exhibit A

## ★ 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow

2 = Green

## ★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low

2 = High

## ★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1<sup>a</sup>)2 = Type B (SP1<sup>b</sup>)

## ★ 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis')

2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')

3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')

4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 268A')

## ★ 10. LEAFLET SHAPE:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Specify) \_\_\_\_\_

## 11. LEAFLET SIZE:

9200074

☐ 21 = Small ('Amsoy 71'; 'A5312')  
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

## 12. LEAF COLOR:

☐ 21 = Light Green ('Weber'; 'York')  
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

## ★ 13. FLOWER COLOR:

☐ 2

1 = White

2 = Purple

3 = White with purple throat

## ★ 14. POD COLOR:

☐ 1

1 = Tan

2 = Brown

3 = Black

## ★ 15. PLANT PUBESCENCE COLOR:

☐ 2

1 = Gray

2 = Brown (Tawny)

## 16. PLANT TYPES:

☐ 21 = Slender ('Essex'; 'Amsoy 71')  
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

## ★ 17. PLANT HABIT:

☐ 3

1 = Determinate ('Gnome'; 'Braxton')

2 = Semi-Determinate ('Will')

3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

## ★ 18. MATURITY GROUP:

☐ 0 ☐ 71 = 000  
9 = VI2 = 00  
10 = VII3 = 0  
11 = VIII4 = I  
12 = IX5 = II  
13 = X

6 = III

7 = IV

8 = V

## ★ 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

## BACTERIAL DISEASES:

★

☐ 0Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

★

☐ 0Bacterial Blight (*Pseudomonas glycinea*)

★

☐ 0Wildfire (*Pseudomonas tabaci*)

## FUNGAL DISEASES:

★

☐ 0Brown Spot (*Septoria glycines*)Frogeye Leaf Spot (*Cercospora sojina*)

★

☐ 0

Race 1

☐ 0

Race 2

☐ 0

Race 3

☐ 0

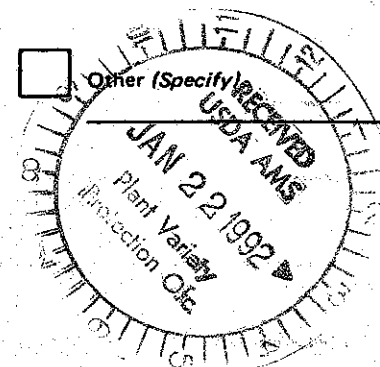
Race 4

☐ 0

Race 5

☐ 0Target Spot (*Corynespora cassicola*)☐ 0Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)☐ 0Powdery Mildew (*Microsphaera diffusa*)

★

☐ 0Brown Stem Rot (*Cephalosporium gregatum*)☐ 0Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

## 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

## FUNGAL DISEASES: (Continued)

- ★ ☐ 0 Pod and Stem Blight (*Diaporthe phaseolorum* var. *sojae*)
- ☐ 1 Purple Seed Stain (*Cercospora kikuchii*)
- ☐ 0 Rhizoctonia Root Rot (*Rhizoctonia solani*)
- Phytophthora Rot (*Phytophthora megasperma* var. *sojae*)
- ★ ☐ 1 Race 1 ☐ 0 Race 2 ☐ 0 Race 3 ☐ 0 Race 4 ☐ 0 Race 5 ☐ 0 Race 6 ☐ 1 Race 7
- ☐ 0 Race 8 ☐ 0 Race 9 ☐ Other (Specify) \_\_\_\_\_

## VIRAL DISEASES:

- ☐ 0 Bud Blight (Tobacco Ringspot Virus)
- ☐ 0 Yellow Mosaic (Bean Yellow Mosaic Virus)
- ★ ☐ 0 Cowpea Mosaic (Cowpea Chlorotic Virus)
- ☐ 0 Pod Mottle (Bean Pod Mottle Virus)
- ★ ☐ 0 Seed Mottle (Soybean Mosaic Virus)

## NEMATODE DISEASES:

- Soybean Cyst Nematode (*Heterodera glycines*)
- ★ ☐ 1 Race 1 ☐ 0 Race 2 ☐ 1 Race 3 ☐ 0 Race 4 ☐ Other (Specify) \_\_\_\_\_
- ☐ 0 Lance Nematode (*Hoplolaimus Colombus*)
- ★ ☐ 0 Southern Root Knot Nematode (*Meloidogyne incognita*)
- ★ ☐ 0 Northern Root Knot Nematode (*Meloidogyne Hapla*)
- ☐ 0 Peanut Root Knot Nematode (*Meloidogyne arenaria*)
- ☐ 0 Reniform Nematode (*Rotylenchulus reniformis*)
- ☐ OTHER DISEASE NOT ON FORM (Specify): \_\_\_\_\_

## 20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ★ ☐ 1 Iron Chlorosis on Calcareous Soil
- ☐ 2 Other (Specify) Metribuzin tolerance

## 21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ☐ 0 Mexican Bean Beetle (*Epilachna varivestis*)
- ☐ 0 Potato Leaf Hopper (*Empoasca fabae*)
- ☐ Other (Specify) \_\_\_\_\_

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Flyer	Seed Coat Luster	Resnik
Leaf Shape	Essex	Seed Size	Pennyrile
Leaf Color	Ripley	Seed Shape	Williams 82
Leaf Size	Flyer	Seedling Pigmentation	Resnik



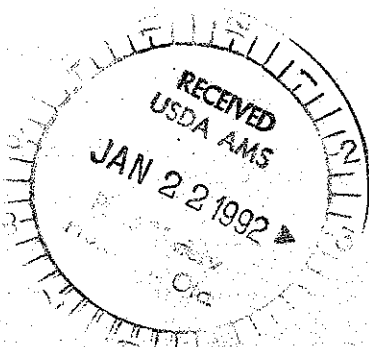
## 23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/POD
				CM Width	CM Length	% Protein	% Oil		
Corsica Submitted	129	1.6	81			42.2	20.4	17.0	2.1*
Spencer Name of Similar Variety	129	1.4	84			41.1	21.4	18.0	2.5*

## PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

\*Average 3 plants

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.



## EXHIBIT E - STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP

The variety CORSICA was developed by Dr. William J. Kenworthy, an employee of the University of Maryland whose research program and salary is primarily funded by the Maryland Agricultural Experiment Station, Maryland Institute for Agriculture and Natural Resources. By agreement between the employee and the Maryland Agricultural Experiment Station, all rights to any variety or germplasm developed by an employee are assigned to the Maryland Agricultural Experiment Station. No rights to such varieties or germplasm are retained by the employee.